

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method of controlling a clock frequency of a processor, comprising:
 - acquiring an executable instruction count per unit time of the processor, the count being a count of instructions related to software programs, including an application and an operating system (OS), executed by the processor;
 - acquiring a clock count per unit time of the processor;
 - determining whether a ratio of the executable instruction count to the clock count exceeds a predetermined value; and
 - controlling the clock frequency of the processor in accordance with a result of the determination.
2. (Original) The method according to claim 1, wherein a series of processes including the acquisition of the executable instruction count, the acquisition of the clock count, the determination, and the control of the clock frequency are repetitively executed at a predetermined time interval.
3. (Original) The method according to claim 2, wherein the predetermined time interval is changeable.

4. (Original) The method according to claim 1, wherein the control includes controlling to decrease the clock frequency of the processor when the ratio is determined not to exceed the predetermined value.

5. (Original) The method according to claim 1, wherein the determination includes determining whether a ratio of i) a difference between two executable instruction counts acquired successively to ii) the clock count exceeds a predetermined value.

6. (Original) The method according to claim 1, wherein the determination includes determining whether a ratio of i) a sum of executable instruction counts which are successively acquired and multiplied by a predetermined weighting factor to ii) a sum of clock counts which are successively acquired and multiplied by a predetermined weighting factor exceeds a predetermined value.

7. (Original) The method according to claim 1, wherein the control includes increasing the clock frequency when the ratio is determined as a result of the determination to exceed the predetermined value, and decreasing the clock frequency when the ratio is determined not to exceed the predetermined value.

8. (Original) The method according to claim 1, wherein the predetermined value is changeable.

9. (Currently Amended) An electronic apparatus, comprising:

 a clock oscillator configured to supply a clock signal;

 a processor configured to generate an internal clock on the basis of the clock signal supplied from the clock oscillator; and

 a control unit configured to control a frequency of the internal clock in accordance with a ratio of an executable instruction count per unit time to a clock count per unit time of the internal clock generated by the processor, the count being a count of instructions related to software programs, including an application and an operating system (OS), executed by the processor.

10. (Original) The apparatus according to claim 9, wherein the control unit determines whether the ratio of the executable instruction count to the clock count exceeds a predetermined value, and controls a clock frequency of the processor in accordance with a result of the determination.

11. (Original) The apparatus according to claim 9, wherein the control unit determines whether a ratio of i) a difference between two executable instruction counts acquired successively to ii) the clock count exceeds a predetermined value, and controls a clock frequency of the processor in accordance with a result of the determination.

12. (Original) The apparatus according to claim 9, wherein the control unit determines whether a ratio of i) a sum of executable instruction counts which are

successively acquired and multiplied by a predetermined weighting factor to ii) a sum of clock counts which are successively acquired and multiplied by a predetermined weighting factor exceeds a predetermined value, and controls a clock frequency of the processor in accordance with a result of the determination.

13. (Original) The apparatus according to claim 9, wherein the control unit increases the clock frequency when the ratio is determined to exceed the predetermined value, and decreases the clock frequency when the ratio is determined not to exceed the predetermined value.

14. (New) The method according to claim 1, wherein controlling comprises: determining an operational mode from a plurality of operational modes, associated with a plurality of threshold values; selecting a threshold value associated with the determined operational mode as the predetermined value; and changing the clock frequency of the processor based on the ratio and the predetermined value.

15. (New) The method according to claim 14, wherein the plurality of operational modes include at least a power saving mode, a standard mode, and a high-speed mode.

16. (New) The method according to claim 14, wherein selecting the threshold value further includes:

searching a table containing information about relationships between the operational modes and the threshold values; and
selecting the threshold value associated with the determined operational mode as the predetermined value;